

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1.-16. (Canceled).

17. (Currently amended): A dye-sensitized solar cell comprising a transparent electrode substrate, a working electrode having an oxide semiconductive porous film formed on the transparent electrode substrate which is made of oxide semiconductive fine particles and having a photo-sensitizing dye absorbed thereon, and a counter electrode provided opposing the working electrode, and an electrolyte layer comprising ~~the an~~ electrolyte composition which is provided between the working electrode and the counter electrode, and wherein the electrolyte composition comprises an ionic liquid and a halogen-based redox pair, wherein the ionic liquid includes a cation having a quaternized nitrogen atom and a dicyanoamide anion~~anion, the cation being an imidazolium cation having a quaternary nitrogen atom or a pyridinium cation having a quaternary nitrogen atom~~.

18. (Original): The dye-sensitized solar cell according to claim 17 wherein the transparent electrode substrate comprises a conductive layer made of a conductive material on a transparent substrate.

19. (Original): The dye-sensitized solar cell according to claim 18 wherein the transparent substrate includes glass, a transparent plastic substrate, and a polished plate of a ceramic.

20. (Original): The dye-sensitized solar cell according to claim 18 wherein the conductive layer includes a transparent oxide semiconductor selected from the group consisting of tin-doped indium oxide (ITO), tin oxide (SnO_2), fluorine-doped tin oxide (FTO), and mixtures thereof.

21. (Original): The dye-sensitized solar cell according to claim 18 wherein the conductive layer has a thickness of between about $0.05\ \mu\text{m}$ and $2.0\ \mu\text{m}$.

22. (Original): The dye-sensitized solar cell according to claim 17 wherein the oxide semiconductor porous film is a porous thin layer with a thickness between about 0.5 and $50\ \mu\text{m}$ containing as a main component oxide semiconductor fine particles which include titanium oxide (TiO_2), tin oxide (SnO_2), tungsten oxide (WO_3), zinc oxide (ZnO), niobium oxide (Nb_2O_5), and mixtures thereof, where said oxide semiconductor fine particles have an average particle diameter between $1\ \text{nm}$ to $1000\ \text{nm}$.

23. (Original): The dye-sensitized solar cell according to claim 17 measuring photoelectric conversion efficiency greater than 4.5% .

24. (New): The dye-sensitized solar cell according to claim 17, wherein the cation further comprises a substituent group on the quaternary nitrogen atom, the substituent group being selected from a group consisting of an alkyl group, a cycloalkyl group, an aryl group, and an aralkyl group.

25. (New): The dye-sensitized solar cell according to claim 17, wherein the cation further comprises a substituent group on a different atom of the imidazolium or pyridinium ring than the quaternized nitrogen atom, the substituent being selected from a group consisting of an alkyl group, a cycloalkyl group, an aryl group, and an aralkyl group.

26. (New): The dye-sensitized solar cell according to claim 17, wherein the ionic liquid comprises 1-ethyl-3-methylimidazolium-dicyanoamide or 1-butylpyridinium-dicyanoamide.